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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/617,624	07/17/2000	Tim Carroll	068167.0104	8509
41505	7590	11/18/2004	EXAMINER	
WOODCOCK WASHBURN LLP ONE LIBERTY PLACE - 46TH FLOOR PHILADELPHIA, PA 19103			CRAIG, DWIN M	
			ART UNIT	PAPER NUMBER
			2123	

DATE MAILED: 11/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/617,624

Applicant(s)

CARROLL ET AL.

Examiner

Dwin M Craig

Art Unit

2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☒ Claim(s) 8-16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) # _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. **Claims 1-16** have been presented for reconsideration in view of Applicant's arguments.

Response to Arguments

2. Applicant's arguments submitted on 6-30-2004 have been fully considered. The Examiner's response is as follows.

- 2.1 Regarding the Applicants response to a lack of grounds of rejection of dependent Claim 16.

The Examiner apologizes for not expressly disclosing grounds for rejection of dependent Claim 16. This office action will provide proper grounds of rejection for dependent claim 16.

- 2.2 Regarding the Applicant's response to the 35 U.S.C. 103(a) rejections of Claims 1-16, specifically the motivation to combine the two references.

Applicant argued on page 3 of 7 of the 6/30/2004 response:

In the Office Action, the Examiner alleges that "the ability to emulate a VGA adapter in software means that platform specific VGA hardware does not need to be developed for different operating systems, only software emulation layer needs to be developed, which is cheaper and less expensive to develop and upgrade because all of the emulation is performed in software" is the motivation to combine the Campbell and Traut references. However, neither Campbell nor Traut teach or suggest any motivation, and thus the combination of these references is not warranted.

The Examiner notes that in the case, *Ruiz v. A.B. Chance Co.*, 357 F.3d 1270, 69 USPQ2d 1686 (Fed. Cir. 2004) *the court also rejected the notion that "an express written motivation to combine must appear in prior art references...."* Id at 1276, 69, USPQ2d at 1690.

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Please see section 2143.01 of the MPEP. Therefore the Examiner notes that there is not a requirement that the express motivation to combine be disclosed in a prior art reference.

2.3 Regarding the Applicant's response to the 35 U.S.C. 103(a) rejections of claim 1-16, specifically in regards to the 3rd criteria for an obviousness rejection.

Applicant argued on page 4 of 7 of the 6/30/2004 response:

In regards to the third criteria (that the prior art references or combination of references must teach or suggest all the claim elements), Applicants submit that nowhere does Cambell and Traut, separately or in combination, teach or suggest "emulating VGA hardware" as explicitly set forth in independent Claims 1, 2 and 6 of the present Application upon which Claims 3-5 and 7-16 depend.

The Examiner has determined that the cited prior art does not *expressly* disclose the claimed limitation of emulating VGA hardware as disclosed in the *Cambell and Traut* references. In light of the new prior art references provided in this office action, the Examiner withdraws the earlier 35 U.S.C. 103(a) rejections of claim 1-16.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. **Claims 1-7** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Giles U.S.**

Patent 6,115,054 in view of **Denio et al. U.S. Patent 5,269,021**.

3.1 As regards independent **Claims 1, 2 and 6** the *Giles* reference discloses a method for emulating VGA hardware (**Figure 3 Items 102 and 108, Figure 4 Item 158, Col. 4 Lines 35-46**), supporting multiple video modes (**Col. 4 Lines 35-46**), and receiving an instruction from a guest operating system and directed towards the VGA hardware wherein the instruction is associated with the current VGA mode (**Col. 3 Lines 66-68 and Col. 4 Lines 1-13**) and generating a set of new VGA mode flags (**Figure 5 Item 180**).

However, the *Giles* reference does not expressly disclose a jump table containing a pointer to the address of a function.

The *Denio et al.* reference discloses a jump table with a pointer to the address of a function (**Col. 14 Lines 29-44**).

It would have been obvious, to one of ordinary skill in the art, at the time the invention was made to have combined the video processor emulation methods of the *Giles* reference with the jump table methods of the *Denio et al.* reference because, using a jump table with pointers to functions reduces the burden on the host processor which results in increased processor speed (*Denio et al. Col. 1 Lines 20-23*).

3.2 As regards dependent **Claims 3 & 7** the *Giles* reference discloses a mode table (**Figure 6 Item 200 Global State Record & Col. 7 Lines 5-67 Col. 8 Lines 1-8**).

However, the *Giles* reference does not expressly disclose a jump table with pointers to functions.

The *Denio et al.* reference discloses a jump table with a pointer to the address of a function (**Col. 14 Lines 29-44**).

It would have been obvious, to one of ordinary skill in the art, at the time the invention was made to have combined the video processor emulation methods of the *Giles* reference with the jump table methods of the *Denio et al.* reference because, using a jump table with pointers to functions reduces the burden on the host processor which results in increased processor speed (*Denio et al. Col. 1 Lines 20-23*).

3.3 As regards dependent **Claim 4** the *Giles* reference discloses a *cache* (**Figure 6 Item 156-1**).

3.4 As regards dependent **Claim 5** the *Giles* reference discloses commands for changing pixels (**Col. 7 Lines 49-51**).

Allowable Subject Matter

4. **Claims 8-16** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

5. Claims 1-16 have been presented for reconsideration based on the Applicant's arguments. **Claims 1-7** are rejected. **Claims 8-16** are objected to. This action is **NON-Final**.

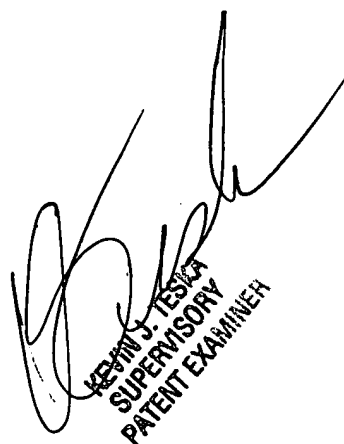
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5.1 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwin M Craig whose telephone number is (571) 272-3710. The examiner can normally be reached on 10:00 - 6:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Teska can be reached on (571)272-3716. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DMC



KEVIN J. TESKA
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PATENT EXAMINER